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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/903,680 | 07/13/2001 | Toshihiko Nishida | 7390/71620 | 4286 |

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| EXAMINER |
|---|
| YAO, SAMCHUAN CUA |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1733 | 6 |

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/903,680 | NISHIDA ET AL. | |
| | Examiner | Art Unit | |
| | Sam Chuan C. Yao | 1733 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *31 July 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☒ Claim(s) *4-6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-6, drawn to an apparatus for manufacturing a resin-impregnated cured sheet, classified in class 156, subclass 583.5.

   II. Claims 7-8 and 11-16, drawn to a method for manufacturing a resin-impregnated cured sheet, classified in class 156, subclass 181.

   III. Claims 9-10, drawn to an apparatus for manufacturing a carboneous material sheet, classified in class 425, subclass 371.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and (I & III) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process such as using the apparatus to form a rigid board such as a fiberboard.

Groups I and III are directed to distinct apparatus, where patentability in the independent claims of each group is based on divergent structural features. Independent claim 1 in Group I requires *"conveyance means is equipped with at least one rotational belt set comprising a drive roll, follower roll, and an endless belt which put one and around the drive roll and follower roll"*, but not *"a carbonization treatment*

*chamber for carbonizing the resin-impregnated cured sheet ..."* as required in independent claim 9 in Group III; and vice versa. The differences between these groups are numerous and significant to the extent that the inventions constitute prima facie patentably distinct combinations, absent evidence to the contrary. This can readily and clearly be demonstrated by a side-by-side comparison of the independent claims. Similarities of the independent claims are merely superficial, since certain significant limitations in one of the groups find no counterpart in the other group(s) and vice versa.

Presently, no claim is generic. Rejoinder of these two groups of apparatus will be considered, upon indication of allowable subject matter, depending on the basis thereof.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and because the search required for Group I is not required for Group III, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Mr. Kendrew Colton on 06-29-03 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Objections***

6. Claims 4-6 are objected to under 37 CFR 1.75(c) as being in improper form because multiple dependent claims 4-6 are dependent on another multiple dependent claim 3. See MPEP § 608.01(n). Accordingly, the claims 4-6 have not been further treated on the merits.

***Claim Rejections - 35 USC § 102/103***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by anyone of (Held (US 4,988,478; abstract; figure 2), Kaufmann et al (US 5,407,516; abstract; figure 1) and Schwarz et al (US 4,670,080; abstract; figure)).

10. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sjolin et al (US 6,375,777; abstract, figure 1) using a PCT Pub. No. WO 99/12736 which has a publication date of 3-18,1999.

11. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Held (US 5,141,583).
Held '583 discloses an apparatus for continuously fabricating a laminate, the process comprises a conveyance means for continuously moving a plurality of resin impregnated papers, the process comprises a conveyance means for continuously moving a plurality of resin impregnated papers, wherein the conveyance means comprises a pair of press-bands which each includes a rotating belt set including two reversing drums, and a belt secured around the reversing drums; a heating means for curing the impregnated papers to prehardened to a B-stage in a heating zone; and, a take-up roller unit (col. 5 line 8 to col. 6 line 68; col. 7 line 9 to col. 8 line 46; col. 9 lines 5-65; figures 1-2). Held '583 also teaches providing channels to a pair of reversing drums and pressure plate for re-circulating a heated liquid (taken to be a pressurized heated liquid; col. 6 lines 25-68; figure 2). Although not explicitly disclosed, one of the reversing drums is taken to be a drive roll, while the other is taken to be a follower roll. In any event, such would have been obvious in the art as such is conventional in the art.

12. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Held (US 4,687,528)
With respect to claims 1 and 3, Held '528 discloses an apparatus for continuously fabricating a laminate, the process comprises a conveyance means for continuously

moving a plurality of resin impregnated papers, wherein the conveyance means comprises a pair of press-bands which each includes a rotating belt set including two reversing drums, and a belt secured around the reversing drums; a heating means for curing the impregnated papers in a heating zone; and, a take-up roll or reroll unit (col. 2 lines 60-63; col. 5 line 41 to col. 6 line 62; col. 8 lines 38-52; claim 1; figures 1-3). Moreover, Held '528 teaches sub-dividing the *"heating zone beginning at the inlet into the [press-bands] at reversing drums 4 and 6"* (col. 6 lines 55-59). In other words, Held also teaches providing a pair of heat-pressing rolls to nip and preheat the impregnated papers. Although not explicitly disclosed, one of the reversing drums is taken to be a drive roll, while the other is taken to be a follower roll. In any event, such would have been obvious in the art as such is conventional in the art.

13. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sjolin et al (US 6,375,777), Held (US 5,141,583) or Held (US 4,687,528) as applied to claim 1 in numbered paragraph 9 or 10 above, and further in view of Verboom (US 3,871,290) and in view of either (Stocker (US 2,269,884), Rautakorpi (US 6,536,704) or Crabtree (US 2,461,109)).

It would have been obvious in the art to provide a pair of slitting means for trimming side edges of a laminated web before the web is reeled into a reroll unit, because it is conventional in the art to provide a pair of slitting means for trimming side edges of a web in order to remove unwanted excess or irregularity around side edges of the web before the web is reeled into a roll-up shaft as exemplified in the teachings of Verboom (figures 1-3). Moreover, it would have been obvious in the art to use a reroll unit which

includes a pressing roll for retaining a winding pressure as such is notoriously well known in the art as exemplified in the teachings of Stocker (figure 1), Rautakorpi (figure 1) or Crabtree (figure 1).

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7115 for regular communications and (703) 305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

scy
June 28, 2003